

```
#include <stdio.h>

#include <string.h>


#define MAX_FILES 100

#define NAME_LEN 30


struct Directory {

    char fileNames[MAX_FILES][NAME_LEN];

    int fileCount;

};


void createFile(struct Directory *dir, const char *name) {

    // Check for duplicate file

    for (int i = 0; i < dir->fileCount; i++) {

        if (strcmp(dir->fileNames[i], name) == 0) {

            printf("Error: File '%s' already exists!\n", name);

            return;

        }

    }

    if (dir->fileCount < MAX_FILES) {

        strcpy(dir->fileNames[dir->fileCount], name);

        dir->fileCount++;

        printf("File '%s' created successfully.\n", name);

    } else {

        printf("Error: Directory is full!\n");

    }

}
```

```

void deleteFile(struct Directory *dir, const char *name) {
    int found = 0;
    for (int i = 0; i < dir->fileCount; i++) {
        if (strcmp(dir->fileNames[i], name) == 0) {
            found = 1;
            for (int j = i; j < dir->fileCount - 1; j++) {
                strcpy(dir->fileNames[j], dir->fileNames[j + 1]);
            }
            dir->fileCount--;
            printf("File '%s' deleted successfully.\n", name);
            break;
        }
    }
    if (!found) {
        printf("Error: File '%s' not found!\n", name);
    }
}

```

```

void searchFile(struct Directory *dir, const char *name) {
    for (int i = 0; i < dir->fileCount; i++) {
        if (strcmp(dir->fileNames[i], name) == 0) {
            printf("File '%s' found at position %d.\n", name, i + 1);
            return;
        }
    }
    printf("File '%s' not found.\n", name);
}

```

```
void listFiles(struct Directory *dir) {  
    if (dir->fileCount == 0) {  
        printf("Directory is empty.\n");  
    } else {  
        printf("Files in Directory:\n");  
        for (int i = 0; i < dir->fileCount; i++) {  
            printf("%d. %s\n", i + 1, dir->fileNames[i]);  
        }  
    }  
}
```

```
int main() {  
    struct Directory dir;  
    dir.fileCount = 0;  
  
    int choice;  
    char name[NAME_LEN];  
  
    while (1) {  
        printf("\nSingle-Level Directory Operations:\n");  
        printf("1. Create File\n2. Delete File\n3. Search File\n4. List Files\n5. Exit\n");  
        printf("Enter your choice: ");  
        scanf("%d", &choice);  
  
        switch (choice) {  
            case 1:  
                printf("Enter file name to create: ");  
                scanf("%s", name);
```

```
        createFile(&dir, name);

        break;

case 2:

    printf("Enter file name to delete: ");

    scanf("%s", name);

    deleteFile(&dir, name);

    break;

case 3:

    printf("Enter file name to search: ");

    scanf("%s", name);

    searchFile(&dir, name);

    break;

case 4:

    listFiles(&dir);

    break;

case 5:

    printf("Exiting...\n");

    return 0;

default:

    printf("Invalid choice! Try again.\n");

    }

}

return 0;

}
```

Single-Level Directory Operations:

1. Create File
2. Delete File
3. Search File
4. List Files
5. Exit

Enter your choice: 1

Enter file name to create: ABC

File 'ABC' created successfully.

Single-Level Directory Operations:

1. Create File
2. Delete File
3. Search File
4. List Files
5. Exit

Enter your choice: 2

Enter file name to delete: ABC

File 'ABC' deleted successfully.

Single-Level Directory Operations:

1. Create File
2. Delete File
3. Search File
4. List Files
5. Exit

Enter your choice: 4

Directory is empty.

Single-Level Directory Operations:

1. Create File
2. Delete File
3. Search File
4. List Files
5. Exit

Enter your choice: 5

Exiting...

...Program finished with exit code 0

Press ENTER to exit console.